9 JULY 1999



Weather

# MCCONNELL AIR FORCE BASE WEATHER SUPPORT

## COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 15-1, *Atmosphere and Space Environmental Support*. It establishes the responsibilities and procedures for providing and using weather services at McConnell AFB. It implements AFMAN 15-111, AFMAN 15-124, AFMAN 15-125, and AMCI 15-101. It applies to all agencies described herein.

## SUMMARY OF REVISIONS

This instruction is a revision of MAFBI 15-105, dated 1 April 1998. It adds information about the new 22 OSS/OSW Weather WEB Site on the McConnell AFB Intranet Homepage in paragraph 1.5.10. It reflects the increased desired lead time for severe thunderstorm (winds  $\geq$  50 knots, hail  $\geq$  3/4 inch) warnings from 1 hour to 2 hours as directed by HQ USAF/DOW in paragraph 4.2. In this revision, the Command Post is tasked in paragraph 6.2.3. to issue base cable television audio overrides to inform base housing occupants of severe thunderstorm warnings (in addition to tornado warnings from previous instruction). Lastly, this revision adds the severe weather warning criteria of 65 knots in paragraph 7.3. This is the warning criteria that prompts flight line personnel to weigh down the nose of KC-135 and B-1B aircraft.

Chapter 1— General Information				
	1.1.	General.	4	
	1.2.	Abbreviations and Terms Explained.	4	
	1.3.	Duty Priorities.	4	
	1.4.	Equipment Limitations.	5	
	1.5.	Responsibilities.	5	
	1.6.	Release of Weather Information	6	

Chapter 2-	- Forecasting Services
2.1.	Duty Hours.
2.2.	Terminal Aerodrome Forecast (TAF).
2.3.	Briefings.
2.4.	Pilot-to-Metro-Service (PMSV).
Chapter 3-	- Observing Services
3.1.	Duty Hours.
3.2.	Basic Weather Watch (BWW).
3.3.	Observing Site Limitations.
3.4.	Cooperative Weather Watch.
3.5.	Types of Observations.
3.6.	Dissemination of Observations.
3.7.	Format and Content of METAR/SPECI Observations.
3.8.	Criteria for taking SPECI observations.
3.9.	LOCAL Observation Reporting Requirements.
3.10	Bird Strike Prevention Assistance
Chapter 4-	– WEATHER WARNINGS AND WATCHES
4.1.	General.
4.2.	Weather Warning Criteria.
4.3.	Weather Watch Criteria.
4.4.	Dissemination of Watches/Warnings.
Chapter 5-	- WEATHER ADVISORIES
5.1.	General.
5.2.	Weather Advisory Criteria.
5.3.	Dissemination of Weather Advisories.
Chapter 6-	- TORNADO AND SEVERE THUNDERSTORM PROCEDURES
6.1.	General.
6.2.	Procedures.
Chapter 7-	— DISSEMINATION OF WEATHER WATCHES, WARNINGS AND ADVISORIES
7.1.	Procedures.

MAFBI15-105 9 July 1999				
7.2.	Watches.	21		
7.3.	Warnings.	21		
7.4.	Forecast Advisories.	21		
7.5.	Observed Advisories.	21		
7.6.	Dissemination Tree for weather watches, warnings and advisories	22		
Chapter 8—	- RECIPROCAL SUPPORT	25		
8.1.	General.	25		
8.2.	Responsibilities.	25		
Attachment	t 1— Sample AWDS Dissemination Format	28		

#### **GENERAL INFORMATION**

**1.1. General.** The 22 OSS/OSW provides and arranges weather services for the 22 ARW, the 184 BW, 931 ARG, and other units assigned to McConnell AFB. Basic concepts and procedures are outlined in Air Force and Major Air Command directives. This document establishes requirements and procedures for areas of weather support that must be coordinated at the local level to meet mission needs. It consolidates weather support requirements and procedures for peacetime operations and eliminates the need for written agreements between the weather unit and supported organizations. It does not cover weather support procedures for emergency war operations or certain other special operations or procedures. These are covered in applicable plans/regulations.

# 1.2. Abbreviations and Terms Explained.

- 1.2.1. Abbreviations.
  - 1.2.1.1. BWS: Base Weather Station
  - 1.2.1.2. AWN: Automated Weather Network
  - 1.2.1.3. ATC: Air Traffic Control
  - 1.2.1.4. UTC: Coordinated Universal Time
  - 1.2.1.5. FLIP: Flight Information Publication
  - 1.2.1.6. CIN: Commander's Information Network
- 1.2.2. Terms.
  - 1.2.2.1. Automated Weather Distribution System (AWDS). An integrated automated system designed to provide weather and air traffic control products to support the missions of base weather stations, weather support units, air traffic control agencies, and DoD command posts.
  - 1.2.2.2. Weather Advisory. A special notice provided to supported customers to alert them of weather conditions that are occurring or forecast to occur and could affect their operations.
  - 1.2.2.3. Weather Warning. A special notice provided to supported customers to alert them of forecast weather conditions of such intensity as to pose a hazard to life or property.
  - 1.2.2.4. Weather Watch. A special notice provided to supported customers to alert them of a potential for weather conditions of such intensity as to pose a hazard to life or property.
- **1.3. Duty Priorities.** Usually, the BWS is manned with only one forecaster and one observer; therefore, all BWS tasks (including observing and/or forecasting) cannot be accomplished simultaneously. The following priority list is arranged in order of relative importance, assuming an open airfield. Forecasters and observers will use their best judgment and may deviate from this list, particularly when there is an immediate threat to life or property.
  - 1.3.1. Complete Single Integrated Operational Plan (SIOP)/emergency war order tasking.
  - 1.3.2. Respond to Skyhook conference calls for aircraft/ground emergencies.
  - 1.3.3. Take and disseminate surface weather observations locally.

- 1.3.4. Answer Pilot to Metro Service (PMSV) calls.
- 1.3.5. Disseminate watches, warnings, and/or advisories locally.
- 1.3.6. Disseminate Pilot Reports (PIREPs) locally.
- 1.3.7. Transmit surface weather observations and PIREPs longline.
- 1.3.8. Provide mission control forecasts.
- 1.3.9. Prepare and issue terminal aerodrome forecasts (TAFs).
- 1.3.10. Provide flight weather briefings.
- 1.3.11. Provide other briefings.
- **1.4. Equipment Limitations.** The weather flight has the arduous task of assessing the current and forecasting the future state of the atmosphere. Inherent in such a task are equipment limitations, as listed below:
  - 1.4.1. Doppler Weather Radar. The Doppler radar is limited by ground clutter in the Wichita area and by the volume coverage pattern of the radar. As a result, small storms over the Wichita area, including McConnell AFB, may not be detected.
  - 1.4.2. Lightning Detection System. Detects only cloud-to-ground lightning strikes. As a result, observers must estimate the distance for cloud-to-cloud and in-cloud lightning strikes.
- **1.5. Responsibilities.** The BWS will provide the following services, using the priority list in paragraph **1.3.** above:
  - 1.5.1. Transmit forecasts and observations using the criteria in Chapter 2 and Chapter 3.
  - 1.5.2. Issue all McConnell AFB weather watches, warnings, and advisories, as specified in **Chapter 4** and **Chapter 5**
  - 1.5.3. The BWS will issue weather watches, warnings, and advisories and disseminate them over AWDS. The BWS will call the Command Post (CP), Airfield Operations and the Control Tower to ensure receipt and acknowledgment of watches, warnings, and advisories.
  - 1.5.4. Provide weather briefings, as required.
  - 1.5.5. Notify 22 ARW/CP and the Control Tower upon evacuation of the BWS and upon assumption of weather support at the BWS.
  - 1.5.6. When the wind equipment is inoperative, notify the Control Tower that the winds will be estimated. The BWS will also notify Control Tower personnel when the wind system is back in operation.
  - 1.5.7. Provide weather facility indoctrination training (to include the cooperative weather watch program, IAW AFI 13-203) to Control Tower personnel.
  - 1.5.8. Report all equipment outages to 22d Communications Squadron (22 CS), Systems Control Center, to include the following information:
    - 1.5.8.1. Equipment or circuit identification.
    - 1.5.8.2. Time of outage.

- 1.5.8.3. Description of problem.
- 1.5.8.4. Impact of outage.
- 1.5.9. Determine when meteorological sensing equipment may be released for scheduled maintenance (PMI).
- 1.5.10. Maintain the 22 OSS/OSW Automated Weather WEB site on the McConnell AFB Intranet Homepage. Units are encouraged to use this WEB site to download flight and ground planning data. This will help 22 OSS/OSW provide more responsive and accurate forecast support for operational missions.
- 1.5.11. Participate in the cooperative weather watch, as outlined in **Chapter 3**. The BWS will also advise Airfield Operations personnel when bird activity is sighted during weather observations.
- 1.5.12. Collect, save, and provide weather data to support accident and mishap investigations.
- 1.5.13. Contact 22 CS/SCMR for PMSV repair.
- 1.5.14. Provide monthly climatology summaries to 22 CES/CEOIS, 22 CES/CEOE, 22 CONS/LGCV, and 22 CONS/LGCK.
- 1.5.15. Maintain the capability to operate from an alternate observing site in the event of evacuation from Bldg 1112.
- **1.6. Release of Weather Information** . The BWS will attempt to satisfy the requests of non-DoD users for weather support. The weather services request should:
  - 1.6.1. Be in support of noncommercial activities.
  - 1.6.2. Be a one time request (and each request made formally).
  - 1.6.3. Not be in direct competition with locally available commercial weather services.
  - 1.6.4. Not be for use in legal proceedings unless cleared by local military legal office.
  - 1.6.5. Help promote local community-military good will.
  - 1.6.6. Be provided without retribution.
  - 1.6.7. Be authorized by at least the operational unit commander.
  - 1.6.8. Not interfere with military mission support activities.

## FORECASTING SERVICES

- **2.1. Duty Hours.** The BWS is manned to provide forecasting services 24 hours a day, 7 days a week. The duty forecaster is the primary source of all official weather forecasts issued for McConnell Air Force Base.
- **2.2. Terminal Aerodrome Forecast (TAF).** These are forecasts for a 24-hour period and are issued every 6 hours. Unless otherwise specified, forecast elements in the main body of the forecast text (clouds, weather, wind, etc.) apply to the area within a 5 statute mile (8 kilometers) radius of the runway complex. The qualifier vicinity (VC) may be used, however, when the phenomenon is expected between 5 miles (8 kilometers) to 10 miles (16 kilometers) of the station. See A1.1. for a sample TAF with a breakdown of the code.
  - 2.2.1. TAF Specification Criteria. Each TAF (scheduled or amended) will specify the time of occurrence to the nearest hour the duration, and intensity (where applicable), of expected weather conditions. The following weather criteria will be specified in TAFs if expected to occur during the forecast period.
    - 2.2.1.1. Ceiling or visibility decreases to less than, or if below, increases to equal or exceed:

Ceiling	Visibility	
3,000 feet	3 miles (4800 meters)	
1,500 feet	2 miles (3200 meters)	
1,000 feet	½ mile (800 meters)	
200 feet		

- 2.2.1.2. Wind:
  - 2.2.1.2.1. Speed change of 10 knots or more.
  - 2.2.1.2.2. Direction change of greater than 30 degrees when the predominant wind speed (including gusts) is expected to be over 15 knots.
- 2.2.1.3. Precipitation.
- 2.2.1.4. Thunderstorms.
- 2.2.1.5. Icing or turbulence (for Cat II aircraft), not associated with thunderstorms, from the surface to 10,000 feet above mean sea level (MSL).
- 2.2.1.6. Nonconvective low level wind shear.
- 2.2.1.7. Any locally established criteria for weather warnings or weather advisories that can be specified in the TAF.

- 2.2.2. TAF Amendments. Forecasters will ensure the TAF is representative of expected or actual conditions. The duty forecaster is required to amend the TAF for the criteria in paragraphs **2.2.2.2.** and **2.2.2.3.** 
  - 2.2.2.1. Forecasters may amend the TAF anytime they consider it advisable in the interest of safety, efficiency of aircraft operations, flight planning, operational control, or in-flight assistance to aircraft to ensure the forecast is representative of actual or forecast conditions.
  - 2.2.2.2. Forecasters will amend the TAF:
    - 2.2.2.2.1. Anytime an unforecast change is expected to occur, or is expected to last more than 30 minutes and is not correctly forecast by the next whole hour.
    - 2.2.2.2.2. Anytime an unforecast change occurs, is expected to last at least 30 minutes and is not forecast by the next whole hour from the time of occurrence (e.g., if the time is 2147Z, the next whole hour is 2200Z, not 2300Z).
    - 2.2.2.3. Anytime a forecast condition does not occur by the specified hour and is not expected to occur within the next 30 minutes (e.g., a forecast change is expected to occur by 2200Z, but doesn't happen; an amendment must be issued by 2230Z).
    - 2.2.2.2.4. Temporary (TEMPO) groups will be amended anytime they become predominant or do not occur within the first hour specified by the TAF (e.g., TEMPO 1518, is the specified temporary condition expressed in the TAF has not occurred by 1559Z, the TAF must be amended by that time).
  - 2.2.2.3. TAF Amendment Criteria. The duty forecaster will amend the forecast for the following criteria:
    - 2.2.2.3.1. Ceiling or visibilities are observed or later forecast to increase to or exceed, or decrease to less than any of the following values:

Ceiling	Visibility
3,000 feet	3 statute miles (4800 meters)
1,000 feet	2 statute miles (3200 meters)
300 feet	1 statute mile (1600 meters)
200 feet	1/2 statute mile (800 meters)

#### 2.2.2.3.2. Surface Winds:

- 2.2.2.3.2.1. Predominant wind speed (or gust) is 10 knots or more and is different from the forecast wind speed/gust. For example, a forecast of 23018G25KT must be amended if observed predominate wind speed is 28 knots or more, or observed gusts are 35 knots or higher. Similarly, the TAF would be amended if predominant winds are 8 knots or less, or gusts are 15 knots or less.
- 2.2.2.3.2.2. Direction change of 30 degrees or more when the predominant wind speed or gusts are expected to be over 15 knots.

- 2.2.2.3.3. Precipitation when:
  - 2.2.2.3.3.1. Unforecast freezing precipitation begins or forecasted freezing precipitation ends.
  - 2.2.2.3.3.2. The beginning or ending of hail causing local weather warning or weather advisory that can be specified in the TAF to be issued, canceled, or amended.
  - 2.2.2.3.3.3. Of such intensity to cause a change in runway condition reading (RCR) or runway surface condition (RSC).
- 2.2.2.3.4. Turbulence and Icing. The beginning or ending of turbulence or icing, not associated with thunderstorms, from surface to 10,000 feet (MSL) and which first meets, exceeds, or decreases below moderate or greater thresholds (for CAT II aircraft) and was not specified in the forecast.
- 2.2.2.3.5. Nonconvective low level wind shear:
  - 2.2.2.3.5.1. Is occurring and is expected to continue, or is expected to begin, but is not specified in the forecast.
  - 2.2.2.3.5.2. Is forecast in the TAF, but is not expected to occur during the forecast period.
- 2.2.2.3.6. Weather warning and/or TAF amendable weather advisory criteria:
  - 2.2.2.3.6.1. Occur, or are expected to occur, during the forecast period, but were not specified in the forecast.
  - 2.2.2.3.6.2. Were specified in the forecast, but are no longer occurring or expected to occur during the forecast period.
- **2.3. Briefings.** The BWS provides weather briefings to aircrews and 22 ARW, 931 ARG, and 184 BW staff.
  - 2.3.1. Aircrew Flight Weather Briefings. Generally, these briefings will be given at the BWS in Bldg 1112 or via closed circuit TV. Flying squadrons should coordinate requirements for in-person weather briefings outside the BWS by calling the instructor meteorologist at ext. 3706. Please provide 24-hour minimum notice.
    - 2.3.1.1. Weather briefing documentation. The DD Form 175-1, **Flight Weather Briefing**, the ACC Form 78, **Flight Weather Forecast**, and the AMC Form 181, **AMC Mission Weather Briefing** are the standard briefing forms.
    - 2.3.1.2. Weather briefing content. Flight weather briefings will include the following:
      - 2.3.1.2.1. Brief overview of the general synoptic situation.
      - 2.3.1.2.2. Current and forecast weather (including flight hazards) for takeoff, en route, destination, and alternates with special emphasis on severe weather and flight hazards. Hazards are briefed within 25 miles either side of the route of flight and within 5,000 feet of the planned flight level.
      - 2.3.1.2.3. Doppler weather radar, meteorological satellite, lightning detection system data, and AWDS products will be incorporated into the briefing whenever appropriate.

- 2.3.1.3. 22 ARW/CC Standup Briefing. This briefing will be presented in person or via CCTV by the Weather Flight commander or designated representative. The content of this briefing will be as follows:
  - 2.3.1.3.1. Current weather in the McConnell. Any weather warnings or advisories currently in effect will be briefed at this time.
  - 2.3.1.3.2. 24-hour surface prognosis with emphasis on changes to McConnell AFB weather for the period.
  - 2.3.1.3.3. 24-hour forecast for McConnell AFB, including sky condition, visibility/weather, winds and max/min temperatures.
  - 2.3.1.3.4. Seven-day outlook for McConnell AFB, to include sky condition, significant weather, max/min temperatures.
  - 2.3.1.3.5. 24-hour forecasts for deployed locations with 22ARW aircraft.
- 2.3.1.4. Flight safety briefings. These briefings will be presented upon request from flying unit safety officers with a minimum of 2- or 3-day notice.

## 2.4. Pilot-to-Metro-Service (PMSV).

- 2.4.1. A PMSV, UHF channel 375.2 MHz, is continually monitored by the BWS. Range is approximately 200 NM at or above Flight Level (FL) 200.
- 2.4.2. Aircraft commanders are encouraged to contact the McConnell Control Tower Automated Information Service (ATIS) (UHF channel 269.9 MHz or 124.65 MHz) for the latest surface observation and field conditions. Pilots should contact the BWS on the PMSV or by phone patch for forecasts, hazardous en route weather, pilot reports, or other weather information, as required.

# **OBSERVING SERVICES**

- **3.1. Duty Hours.** The BWS is staffed to provide Basic Weather Watch observing services 24 hours a day, 7 days a week. The duty observer is the primary source of all weather observations disseminated for McConnell Air Force Base.
- **3.2.** Basic Weather Watch (BWW). A BWW is normally conducted from the base weather station by weather personnel who, because of other weather operations duties, cannot monitor the weather continuously. Due to other weather operations duties, along with other restrictions such as a BWS design that does not allow a 360-degree view of the runway complex, etc., weather personnel on duty cannot detect and report all weather changes as they occur. The BWW is augmented by the Cooperative Weather Watch as described in paragraph **3.4**.
- **3.3. Observing Site Limitations.** From the official point of observation (the flightline side of Bldg 1112), the items listed below obstruct the observer from having a full view of the horizon.
  - 3.3.1. The Fire Station (Bldg 1201), 22 XPL Plans (Bldg 1220), and trees 100 to 250 feet to the south and southeast.
  - 3.3.2. Bldg 1218 and Boeing hangar 1/4 mile to the southwest.
  - 3.3.3. Aircraft parked on the ramp 1/4 to 3/4 miles to the west through northwest.
  - 3.3.4. KSANG hangar 1 mile to the northwest.
  - 3.3.5. Numerous base buildings to the north through east through south.
- **3.4.** Cooperative Weather Watch. To offset the BWS's observing limitations, Air Traffic Control personnel are certified to make limited observations. This arrangement is called "a cooperative weather watch." Of primary concern is the occurrence of previously unreported weather conditions which could affect flight safety or which could be critical to the safety or efficiency of other local operations and resources. When the surface and tower prevailing visibility's differ and either is less than 4 miles (6000 meters), Air Traffic Control personnel will relay tower visibility reports for inclusion in weather observation remarks.

# 3.5. Types of Observations.

- 3.5.1. Aviation Routine Weather Reports (METAR). METAR is a routine scheduled observation, as well as the primary observation code used by the United States to satisfy requirements for reporting surface meteorological data. METAR contains a report of wind, visibility, runway visual range, present weather, sky condition, temperature, dew point, and altimeter setting collectively referred to as "the body of the report." In addition, coded and/or plain language information which elaborates on data in the body of the report may be appended to the METAR. This significant information can be found in a section referred to as "Remarks."
- 3.5.2. Aviation Selected Special Weather Report (SPECI). SPECI is an unscheduled observation taken when any of the criteria given in paragraph 3.8. have been observed. SPECI shall contain all data elements found in a METAR, plus additional plain language information which elaborates on

- data in the body of the report. All SPECIs shall be made as soon as possible after the relevant criteria are observed.
- 3.5.3. LOCAL Observation. LOCAL observations are primarily taken to report changes in conditions significant to local airfield operations that do not meet SPECI criteria.
- **3.6. Dissemination of Observations.** All observations are disseminated with an official observation time, it reflects the time, to the nearest minute, that:
  - 3.6.1. The last observation element is observed for METARs and those observations taken for runway changes and aircraft mishaps. For METARs, actual time will not be earlier than 5 minutes prior to the standard time of observation.
  - 3.6.2. An event requires a SPECI or LOCAL observation. For a METAR with SPECI criteria, the actual time will not be earlier than 5 minutes prior to the standard time of observation.
  - 3.6.3. If AWDS is inoperative, observer will telephonically disseminate all observations to the Tower unless otherwise coordinated.
- **3.7. Format and Content of METAR/SPECI Observations.** The following elements are included in METAR and SPECI observations, in the order indicated. Sample observations with explanations are located in A1.2.
  - 3.7.1. Type of Report. METAR or SPECI.
  - 3.7.2. Station Identifier. For example, KIAB for McConnell AFB.
  - 3.7.3. Date and Time of Report. For example, 011158Z indicates an observation transmitted on the first of the month at 1158 UTC.
  - 3.7.4. Allowable report modifier. COR (correction to the observation)
  - 3.7.5. Wind. Direction and speed including gusts. Wind direction is the direction the wind is blowing from to the nearest degree. Speeds are given in knots to the whole knot.
  - 3.7.6. Visibility. Determined by the prevailing visibility which is the greatest visibility equaled or exceeded throughout at least one-half the horizon circle. The visibility does not have to be continuous throughout 180 consecutive degrees; i.e., it may be composed of sectors distributed anywhere around the horizon circle. Prevailing visibility may be determined by the BWS observer or by ATC personnel and is reported in statute miles.
  - 3.7.7. Runway Visual Range (RVR). RVR is reported during periods when prevailing visibility is 1 mile (1600 meters) or less or RVR is 6,000 feet (1830 meters) or less.
  - 3.7.8. Present Weather. Present weather is reported when it is occurring at, or in the vicinity of, the station at the time of observation. The location of weather phenomena is reported as occurring at the station when within 5 statute miles (<8 kilometers) of the point of observation, in the vicinity of the station VC when between 5 (8 kilometers) and 10 statute miles (16 kilometers) of the point of observation, and distant from the station (DSNT) when beyond 10 statute miles (>16 kilometers) of the point of observation.

- 3.7.9. Sky Condition. A visual observation of clouds and atmospheric phenomena aloft consisting of cloud type, amount and height above the surface. Types and amounts are determined by the BWS observer.
- 3.7.10. Temperature. Reported in degrees Celsius to the nearest whole degree. When the temperature is below zero degrees Celsius, the prefix "M" is used.
- 3.7.11. Dewpoint Temperature. Reported in degrees Celsius to the nearest whole degree. When the dewpoint temperature is below zero degrees Celsius, the prefix "M" is used.
- 3.7.12. Altimeter Setting (ALSTG). Coded and reported to the nearest hundredth of an inch of mercury in four digits (without the decimal point).
- 3.7.13. Remarks. Used to report operationally significant information not reported elsewhere, to elaborate on entries made in the body of the report, to report plain language remarks, and record additive data groups.
- **3.8.** Criteria for taking SPECI observations. SPECI observations are taken to report significant changes in weather elements at units which are required and scheduled to transmit surface observations on longline communications. SPECI observations are recorded and transmitted for the following criteria:
  - 3.8.1. Ceiling. The ceiling is observed to form below, decrease to less than or, if below, increase to equal or exceed:
    - 3.8.1.1. 3,000 feet (AFMAN 15-111)
    - 3.8.1.2. 1,500 feet (AFMAN 15-111)
    - 3.8.1.3. 1,000 feet (AFMAN 15-111)
    - 3.8.1.4. 800 feet (DoD FLIP)
    - 3.8.1.5. 700 feet (AFMAN 15-111, DoD FLIP)
    - 3.8.1.6. 600 feet (DoD FLIP)
    - 3.8.1.7. 500 feet (AFMAN 15-111, DoD FLIP)
    - 3.8.1.8. 400 feet (DoD FLIP)
    - 3.8.1.9. 200 feet (AFMAN 15-111, DoD FLIP)
  - 3.8.2. Visibility. Prevailing visibility (i.e., weather station, tower) is observed to decrease to less than or, if below, increase to equal or exceed:
    - 3.8.2.1. 3 miles/4800 meters (AFMAN 15-111).
    - 3.8.2.2. 2 3/4 miles/4400 meters (DoD FLIP).
    - 3.8.2.3. 2 1/4 miles/3600 meters (DoD FLIP).
    - 3.8.2.4. 2 miles/3200 meters (AFMAN 15-111).
    - 3.8.2.5. 1 1/2 miles/2400 meters (DoD FLIP).
    - 3.8.2.6. 1 1/4 miles/2000 meters (DoD FLIP).
    - 3.8.2.7. 1 mile/1600 meters (AFMAN 15-111).

- 3.8.2.8. 3/4 mile/1200 meters (DoD FLIP).
- 3.8.2.9. 1/2 mile/800 meters (DoD FLIP).
- 3.8.3. Tornado or funnel cloud appears or disappears from sight.
- 3.8.4. Thunderstorm begins or ends.
- 3.8.5. Precipitation.
  - 3.8.5.1. Any type of precipitation begins or ends.
  - 3.8.5.2. Freezing precipitation changes in intensity.
  - 3.8.5.3. Ice pellets change in intensity.
- 3.8.6. Squall (SQ). A strong wind characterized by a sudden onset in which the wind speed increases at least 16 knots and is sustained at 22 knots or more for at least one minute. A SPECI is not required to report a squall if one is currently in progress.
- 3.8.7. Wind Shift. The wind direction changes by 45 degrees or more in less than 15 minutes with sustained winds (or gust) of 10 knots or more throughout the wind shift.
- 3.8.8. Runway Conditions. Upon receipt, runway conditions will be transmitted as a SPECI or appended to a METAR or SPECI being taken at the time of notification.
- 3.8.9. Tower Visibility. Upon receipt of a reportable Tower visibility value, when either Tower or Weather's visibility is less than 4 miles (6000 meters) and they differ by a reportable SPECI criteria value.
- 3.8.10. Miscellaneous.
  - 3.8.10.1. Real-World Nuclear Accident. Coded and transmitted when the observer is notified of a real-world nuclear accident. The remark "AEROB" is appended as the last remark.
  - 3.8.10.2. Volcanic Ash. When first observed.
  - 3.8.10.3. Any other meteorological situation which, in the opinion of the observer, is critical to the safety of aircraft operations.
- 3.8.11. Single Element SPECIs. Single element SPECIs will be taken when a delay in reporting all elements of the SPECI would cause an immediate threat to life or property; for example, as in the case of a tornado.
- 3.8.12. Resumption of Observing Services. A SPECI will be taken, disseminated and recorded within 15 minutes after returning to duty following a break in hourly coverage, if a METAR was not filed as scheduled during that 15-minute period (e.g., station evacuated for false fire alarm for a half an hour, when the observer returned and services resumed, a SPECI would be taken).
- **3.9. LOCAL Observation Reporting Requirements.** LOCAL observations are primarily taken to report changes in conditions significant to local airfield operations but do not meet SPECI criteria. LOCAL observations are required for the following criteria:
  - 3.9.1. Aircraft Mishap. Coded and transmitted locally immediately following notification or sighting of an aircraft mishap at or near the station unless there has been an intervening METAR or SPECI. The remark "ACFT MISHAP" identifies this observation.

- 3.9.2. Change in Runway. Following notification of a change in the runway in use weather sensors must be changed and allowed sufficient time to update with current information before taking the observation.
- 3.9.3. Altimeter Setting. At a frequency not to exceed 35 minutes when there has been a change of 0.01 inch Hg (0.3 hPa) or more since the last locally disseminated value. This observation may be taken and disseminated as a "single element" LOCAL.
- 3.9.4. RVR. LOCAL observations are coded and transmitted for RVR when:
  - 3.9.4.1. The ceiling is observed to form below, decrease to less than or, if below, increase to equal or exceed 300 feet.
  - 3.9.4.2. Prevailing visibility is first observed below 1 mile and when prevailing visibility first increases above 1 mile.
  - 3.9.4.3. RVR for the active runway is observed to decrease to less than or, if below, increase to equal or exceed:
    - 3.9.4.3.1. 6,000 feet or 1830 meters (AFMAN 15-111).
    - 3.9.4.3.2. 5,000 feet or 1520 meters (AFMAN 15-111).
    - 3.9.4.3.3. 4,000 feet or 1220 meters (DoD FLIP).
    - 3.9.4.3.4. 2,400 feet or 730 meters (DoD FLIP).
    - 3.9.4.3.5. 1,600 feet or 490 meters (MCI 11-235).
    - 3.9.4.3.6. 1,000 feet or 300 meters (MCI 11-235).
- 3.9.5. Alert Forces. Whenever the Klaxon sounds, or when alert notification is received by any other method
- **3.10. Bird Strike Prevention Assistance**. Observers will notify Base Operations when they observe flocks of birds flying in the vicinity of the airfield. When required, observers will provide solar data to help planners pinpoint high potential periods for bird strikes.

#### WEATHER WARNINGS AND WATCHES

- **4.1. General.** A weather warning is a special forecast for weather phenomena of such an intensity that it poses a hazard to property or life. A weather warning for McConnell AFB will be for the area within 5 NM of the base. A weather watch is a special notice provided to supported customers that alerts them of a <u>potential</u> for weather conditions of such intensity as to pose a hazard to life or property for which the customer must take protective action. Samples of a weather watch and warning can be found in A1.3.
  - 4.1.1. Valid Time: A given period during which a specified weather phenomena is expected to occur.
  - 4.1.2. Lead Time: The time period between the time of issue and the time of weather phenomena occurrence. The minimum desired lead time (MDLT) is specified by the customer and normally reflects the time required to take necessary protective action.
- **4.2. Weather Warning Criteria.** The criteria and desired lead time for weather warnings at McConnell AFB are as listed below:

CriteriaDesired Lead TimeTornadoes10 minHail 3/4 inch or greater in diameter2 hoursSurface winds, steady or gusting  $\geq 65 \text{ knots}$ 2 hoursSurface winds, steady or gusting  $\geq 50 \text{ knots}$ 2 hoursFreezing precipitation45 minutesThunderstorms/lightning0 min (issued upon occurrence)

- **4.3. Weather Watch Criteria.** The criteria for weather watches at McConnell AFB are as listed below. Watches normally precede a weather warning.
  - 4.3.1. Tornado Watch. Issued when meteorological conditions indicate possible tornado development within 5 NM of McConnell AFB.
  - 4.3.2. Severe Thunderstorm Watch. Issued when meteorological conditions indicate severe thunderstorms (thunderstorms with surface winds of 50 knots or greater and/or hail 3/4 inch in diameter) are possible within 5 NM of McConnell AFB.
  - 4.3.3. Winter Storm Watch. Issued when meteorological conditions indicate the potential for snow-fall greater than 2 inches or freezing precipitation within 5 NM of McConnell AFB.
  - 4.3.4. Thunderstorms/Lightning Watch. Issued when potential exists for thunderstorms/lightning to move within 5 NM of McConnell AFB within the next 30 minutes.

# 4.4. Dissemination of Watches/Warnings.

- 4.4.1. AWDS is the primary means by which the BWS disseminates weather warnings and watches. Airfield Operations uses the CIN to relay weather watches and warnings to a variety of agencies. See **Chapter 7** for the weather watches and warnings dissemination tree.
- 4.4.2. If all communications from the BWS are out, BWS personnel will hand-carry all watch and warning notifications to the Airfield Operations Flight for dissemination over the CIN.

## WEATHER ADVISORIES

- **5.1. General.** A weather advisory is a special notice provided to supported customers that alerts them of weather conditions that are occurring or forecast to occur and could affect their operations. There are two types of weather advisories issued at McConnell Air Force Base. A sample weather advisory can be found in A1.3.3.
  - 5.1.1. Observed Weather Advisory (OWA). An observed weather advisory is issued when the customer does not require advance notification of a particular weather phenomenon.
  - 5.1.2. Forecast Weather Advisory (FWA). A forecast weather advisory is issued when the customer requires advance notification of an impending condition with sufficient time to allow protective actions to be taken.
- **5.2. Weather Advisory Criteria.** The criteria and desired lead time for observed and forecast weather advisories issued at McConnell AFB are as listed below:
  - 5.2.1. OWA Criteria: Observed weather advisories are issued for the criteria listed below:
    - 5.2.1.1. Surface winds, steady or gusting, 25 knots or greater.
    - 5.2.1.2. Crosswind component 15 knots or greater not associated with thunderstorms.
    - 5.2.1.3. Crosswind component 25 knots or greater not associated with thunderstorms.
    - 5.2.1.4. Thunderstorms/lightning within 10 NM.
    - 5.2.1.5. Prevailing visibility 1/8 mile or less.
    - 5.2.1.6. Equivalent wind chill temperature decreases to less than or, if below, increases to equal or exceed 20° F.
    - 5.2.1.7. Rain exceeds 1 inch in 2 hours.
    - 5.2.1.8. B-1B Induction Icing: Temperature less than or equal to  $47^{\rm o}$  F and humidity greater than 50 percent.
  - 5.2.2. FWA Criteria: Forecast weather advisories are issued for the criteria listed below for the indicated desired lead times:

Criteria Desired Lead Time
Winds equal to or greater than 35 knots but less than 30 minutes

50 knots

Hail Š 1/2" diameter but less than 3/4" diameter 30 minutes

#### 5.3. Dissemination of Weather Advisories.

- 5.3.1. AWDS is the primary means by which the BWS disseminates both observed and forecast advisories. Airfield Operations uses the CIN to relay weather advisories to a variety of agencies. See **Chapter 7** for the weather advisory dissemination tree.
- 5.3.2. If all communications from the BWS are out, BWS personnel will hand carry all observed and forecast advisory notifications to the Airfield Operations section for dissemination over the CIN.

#### TORNADO AND SEVERE THUNDERSTORM PROCEDURES

**6.1. General.** The BWS relies on Doppler radar and the National Weather Service (NWS) spotter network to provide the base populace with sufficient lead time for protection of life and property during severe weather. In order to increase the awareness of potential tornado development, the BWS will utilize the Tornado Watch/Warning System.

## 6.2. Procedures.

- 6.2.1. The BWS will issue a TORNADO WATCH as early as possible to alert people that meteorological conditions exist or are forecast to exist for tornadic activity. People should remain alert to changing weather conditions, and monitor the radio or television when threatening weather is moving toward the McConnell area.
- 6.2.2. If a tornado is observed, either by a qualified weather observer, local disaster management office, Control Tower personnel or law enforcement agencies, or if a tornado is indicated on radar and it poses a potential threat to McConnell AFB, a tornado warning will be issued and the warning siren activated. All personnel should seek shelter at that time. REMEMBER: A TORNADO WARNING MEANS THAT A TORNADO HAS BEEN SIGHTED OR DETECTED BY WEATHER RADAR.
- 6.2.3. A tornado warning will be disseminated in accordance with procedures in **Chapter 7**. Airfield Operations will pass *tornado warnings and severe thunderstorm warnings* over the Commander's Information Net (CIN). In addition, the weather flight commander (or representative) will verbally notify the 22 ARW/CC and the 22 ARW/CP and brief the threat, usually through a conference call. The base siren will be activated by the BWS or the command post after verbal confirmation from the BWS if time permits.
- 6.2.4. The BWS will cancel all tornado warnings as quickly as possible when the severe weather moves out of the immediate McConnell area, or if it dissipates.
- 6.2.5. The Command Post will issue a cable television audio override and announce the tornado or severe thunderstorm warning over all of McConnell AFB cable TV channels.
- 6.2.6. Emphasis should be on preparedness--severe weather can develop rapidly. A tornado warning may be issued with little advance notification.

# DISSEMINATION OF WEATHER WATCHES, WARNINGS AND ADVISORIES

# 7.1. Procedures.

- 7.1.1. The BWS initiates the dissemination of a watch, warning, or advisory by transmitting it on the AWDS. Each agency on the dissemination net will make additional notifications to other agencies, as indicated in paragraph 7.6.
- 7.1.2. If all communications are out, the BWS will carry watch, warning, and advisory notifications to the Airfield Operations.
- 7.1.3. The numbers in brackets [1-20] indicate the types of watches, warnings, and/or advisories each agency requires.
- **7.2. Watches.** The following weather watches are provided by the BWS:
  - [1] Tornado
  - [2] Severe Thunderstorm
  - [3] Winter Storm
  - [4] Thunderstorms/Lightning
- **7.3. Warnings.** The following weather warnings are provided by the BWS:
- [5] Tornado
- [6] Surface winds > 65 kts
- [7] Surface winds Š 50 kts
- [8] Hail Š 3/4 inch diameter
- [9] Freezing Precipitation
- [10] Thunderstorms/Lightning within 5 NM
- **7.4. Forecast Advisories.** The following forecast weather advisories are provided by the BWS:
  - [11] Surface winds Š 35 kts but < 50 kts
  - [12] Hail Š 1/2 inch but < 3/4 inch diameter
- **7.5.** Observed Advisories. The following observed weather advisories are provided by the BWS.

- [13] Surface winds Š 25 kts
- [14] Crosswinds equal to or exceeding 15 knots
- [15] Crosswinds equal to or exceeding 25 knots
- [16] Thunderstorms/lightning within 10 NM
- [17] Visibility £ 1/8 mile
- [18] Wind Chill temp -20×F or colder
- [19] 1 inch of rain or greater in less than 2 hours
- [20] B-1B Induction Icing Potential

**NOTE:** Because of the frequency of winds in excess of 20 knots at McConnell AFB, units needing to know when winds are exceeding or will exceed 20 knots should call the duty forecaster at ext. 3707.

# 7.6. Dissemination Tree for weather watches, warnings and advisories.

# **Base Weather Station (AWDS)**

Command Post [1-20]

Airborne aircraft [1-16]

22 ARW/CC [1-12, 14-16, 18, 19] (backup to CIN)

22 OG/CC [1-12, 14-16] (backup to CIN)

22 SPTG/CC [2, 4-12] (backup to CIN)

22 LG/CC [1-13, 16, 18, 19] (backup to CIN)

344 ARS/DO [4-16, 20]

349 ARS/DO [4-16, 20]

350 ARS/DO [4-16, 20]

# **Base Weather Station (AWDS)**

384 ARS/DO [4-16, 20]

Airfield Operations (CIN) [1-20]

Crisis Action Team (when in session) [1-18, 20]

22 ARW/CC [1-12, 14-16, 18, 19]

22 OG/CC [1-12, 14-16]

931 ARG/CC

22 SPTG/CC [2, 4-11]

22 LG/CC [1-13, 16, 18, 19]

22 ARW/SE [1-18, 20]

22 ARW/PA [1-5, 9, 10]

DCMC Wichita [5, 10, 15]

127 BS/CC [1-5, 11, 14-16, 20]

22 TRNS/LGTO [1-12, 18, 19]

22 CONS/LGC [1-5, 9, 12, 14-19]

MACC [1-16, 18, 19]

22 SUPS/LGSF [1-16, 18, 19]

22 MXS/LGMCF [1-5, 11, 14-16, 18]

Base Weather Station (AWDS)

# **Base Weather Station (AWDS)**

Airfield Operations (CIN) [1-20]

22 CS/SCBNH [1-19]

EMCS [1-16, 19]

22 SVS/SVMP [1-10]

22 CES/CEOE1 [1-13, 18, 19]

22 SPS/SPO [1-13, 17, 19]

## RECIPROCAL SUPPORT

**8.1. General.** The BWS relies on the assistance of several base agencies to accomplish its weather support mission. This chapter explains the responsibilities and procedures to be followed by these agencies.

# 8.2. Responsibilities.

- **8.2.1. 22 ARW/SE** will notify the BWS of all mishaps or accidents when weather, weather service, or weather personnel are involved or may be a factor.
- 8.2.2. The **22 OG**, **22 SPTG**, **22 LG**, and associate units will establish operational weather support requirements and procedures with 22 OSS/OSW. These agencies will:
  - 8.2.2.1. Determine severe weather notification requirements and establish notification procedures for their subordinate units.
  - 8.2.2.2. Provide changes in requirements and points of contact to the 22 OSS/OSW.
  - 8.2.2.3. Ensure that using agencies notify the BWS when their AWDS is out of service and when it is restored to service.

#### **8.2.3. 22 ARW Command Post** will:

- 8.2.3.1. Notify the BWS of changes to alert/readiness status.
- 8.2.3.2. Will disseminate weather watches, warnings, and advisories as instructed in **Chapter 7**, using discretion and factors such as flying activity, severity of weather, etc. during non-duty hours.
- 8.2.3.3. Notify the BWS of an Alert/Crisis Action Team recall.
- 8.2.3.4. Notify the BWS when their AWDS terminal is out of service and when it is returned to service.
- 8.2.3.5. Provide PIREPs via UHF and/or phone patches to the BWS as they are received or when requested.
- 8.2.3.6. Issue a cable television audio override and announce the tornado or severe thunderstorm warning over all of McConnell AFB cable TV channels.

# **8.2.4.** Base Operations (22 OSS/OSAA) will:

- 8.2.4.1. Disseminate weather watches, warnings and advisories over the CIN as indicated in **Chapter 7** and **Chapter 6**.
- 8.2.4.2. Notify the BWS of all mishaps and emergencies.
- 8.2.4.3. Provide the BWS duty observer with the RSC and RCR for the active runway when reportable conditions begin, are amended, or end.
- 8.2.4.4. Publish BWS hours of operation and PMSV information in Flight Information Publications (FLIPs).

# 8.2.5. Air Traffic Control (22 OSS/OSAB) will:

8.2.5.1. Participate in the cooperative weather watch program as outlined in Chapter 3.

- 8.2.5.2. Ensure the BWS observer is notified of changes in the active runway.
- 8.2.5.3. Notify of light setting changes, if applicable, for RVR.
- 8.2.5.4. Relay all PIREPs of weather phenomena encountered within 100 NM of McConnell AFB, giving location, time, weather event, type aircraft, flight level, and other available information.
- 8.2.5.5. When it is suspected or becomes obvious that the wind equipment is unreliable, notify the weather observer, who will request maintenance. (*NOTE:* Notification of service restoration is a BWS responsibility)
- 8.2.5.6. Upon request, provide the BWS with a radio check of PMSV radio frequency 375.2 MHz.
- 8.2.5.7. Request a weather observation from the BWS when the weather is Instrument Flight Range (IFR) and a runway not designated as the active is being used. This will ensure the RVR for the runway of intended use is available to aircrews conducting an approach.
- **8.2.5.8.** The Chief, Air Traffic Control Training (CATCT), will conduct indoctrination training for BWS personnel. The following items will be covered with the BWS personnel, in detail:
  - 8.2.5.8.1. Mission of the ATC (initial assignment).
  - 8.2.5.8.2. Requirements for relaying weather to aircraft.
  - 8.2.5.8.3. Dissemination of weather information IAW FAAH 7110.65.
    - 8.2.5.8.3.1. PIREP.
    - 8.2.5.8.3.2. Significant meteorological conditions (SIGMETs).
    - 8.2.5.8.3.3. RVR and RCR.
  - 8.2.5.8.4. Air Traffic Control:
    - 8.2.5.8.4.1. Type and purpose.
    - 8.2.5.8.4.2. Effect of weather on handling traffic.
    - 8.2.5.8.4.3. Weather information required.
    - 8.2.5.8.4.4. Verification of altimeter setting.
    - 8.2.5.8.4.5. Radio/telephone procedures.
    - 8.2.5.8.4.6. Provide a tour of the Tower and give a briefing on equipment use.

# **8.2.6.** CS/SCMW (METNAV) will:

- 8.2.6.1. Ensure a 24-hour response capability for repairing weather equipment.
- 8.2.6.2. Follow guidance in 22d Communications Squadron Operating Instruction 33-4 for restoral precedence of BWS equipment.

## **8.2.7. 22 CE/CEOIP** will:

- 8.2.7.1. Provide emergency power backup for the BWS.
- 8.2.7.2. Coordinate monthly generator power tests with the BWS.

# **8.2.8. 22 CS/SCBJ** will:

- 8.2.8.1. Record all BWS outage reports, to include a job control number.
- 8.2.8.2. Notify the responsible repair agent for contract maintenance of leased equipment and communication lines.
- 8.2.8.3. Follow up with the responsible repair agent until service has been restored.
- 8.2.8.4. Coordinate all outage restoration times with the BWS.
- 8.2.8.5. Coordinate with the BWS duty forecaster prior to performing scheduled maintenance.

# **8.2.9. 22CS/SCMR** will: Provide maintenance for the BWS PMSV.

- 8.2.9.1. Coordinate PMSV restoration times with the BWS.
- 8.2.9.2. Coordinate with the BWS duty forecaster prior to performing scheduled maintenance.

THOMAS E. STICKFORD, Colonel, USAF Commander, 22d Operations Group

#### **Attachment 1**

#### SAMPLE AWDS DISSEMINATION FORMAT

A1.1. **Sample Terminal Aerodrome Forecast (TAF) Format:** The following is an example TAF for McConnell AFB KS with explanations and definitions of the code format.

KIAB TAF 011616 03008KT 4800 FGPR FEW000 BKN005 BKN012 QNH3001INS FG FEW000

TEMPO 1821 14012G18KT 3200 -SN -BLSN FEW000 OVC006 620065 SN FEW000

FM2146 15012G20KT 9999 NSW SCT030 QNH2992INS

BECMG 2324 15012G20KT 3200 -SN -BLSN FEW000 OVC004 620046 QNH2983INS SN FEW000

TEMPO 0103 13015G25KT 0200 -FZDZ VV001 660002;

The forecast is for McConnell AFB KS KIAB, valid from 011600Z to 021600Z. The initial condition (1600Z to 2400Z) is for winds from 030 degrees at 8 knots, visibility 4,800 meters in fog, sky cover is few (either a surface based partial obscuration or a layer lower than 50 feet), sky is broken (ceiling) at 500 feet and 1,200 feet. The lowest altimeter setting between 011600Z and 012146Z will be 30.01 inches. There is a fog-induced surface based partial obscuration of from 1/8th to 2/8ths in coverage. Between 1800Z and 2100Z, conditions will vary temporarily (frequently but for short periods) to winds from 140 degrees at 12 knots gusting to 18 knots, visibility 3,200 meters in light snow and light blowing snow, sky cover is few (either a surface based partial obscuration or a layer lower than 50 feet), overcast at 600 feet (the ceiling), the light rime icing from 600 to 5,600 feet AGL. There is a snow-induced surface based partial obscuration of from a 1/8th to 2/8ths in coverage. Beginning at 2146Z conditions will change to wind from 150 degrees at 12 knots gusting to 20 knots, visibility greater than 9,000 meters, no significant weather, sky cover scattered at 3,000 feet and the minimum altimeter setting from 012146Z until 012400Z will be 29.92 inches. Between 012300Z and 012400Z conditions will change gradually to wind from 150 degrees at 12 knots gusting to 20 knots, visibility 3,200 meters in light snow and light blowing snow, sky cover is few (either a surface based partial obscuration or a layer lower than 50 feet), sky is overcast at 400 feet (light rime icing from 400 to 6,400 feet AGL; the lowest altimeter setting from 020000Z until 021600Z will be 29.83 inches). There is a snow-induced surface based partial obscuration from 1/8th to 2/8ths in coverage. Between 0100Z and 0300Z will vary intermittently to winds from 130 degrees at 15 knots gusting to 25 knots, visibility 200 meters with light freezing drizzle, sky totally obscured with vertical visibility 100 feet, and moderate clear icing from surface to 2,000 feet AGL.

# A1.2. Sample Observation Formats.

A1.2.1. Sample Routine METAR Observation. The following is a sample routine METAR observation from Altus AFB OK:

KLTS METAR 011157Z 24012KT 10SM -TSRA FEW008 FEW025TCU SCT030CB 25/20 A2992 RMK PK WND 28045/10 OCNL LTGCG TS 5 NE MOV SE SLPNO SCT030 V BKN TCU SE-S FU FEW008 60010 70010 8/300 52010:

This is a routine (hourly) METAR observation for Altus AFB OK on the 1st of the month at 1157Z. Surface winds are from 240 degrees at 12 knots. Visibility is 10 statute miles with thunderstorms and light rain. Sky condition is a few clouds at 800 feet, few clouds at 2500 feet with cloud type of towering cumulus, scattered clouds at 3000 feet with cloud type cumulonimbus. Temperature is 25× Celsius and the dewpoint is 20× Celsius. Altimeter is 29.92 inches of mercury. The observation includes a remark indicating peak wind for the past hour has been from 280 degrees at 45 knots, 10 minutes past the hour. There is cloud-to-ground lightning and a thunderstorm 5 statute miles to the northeast moving southeast. Sea level pressure is unavailable. Scattered clouds are varying to broken clouds at 3000 feet. Towering cumulus clouds are visible from southeast to south. Smoke is obscuring the sky at 2/8ths or less at 800 feet. Additive data indicates there has been .10 inches of precipitation in the last 3 hours and .10 inches of precipitation in the past 24 hours. There is 3/8ths of low cloud present and pressure has been increasing in the past 3 hours by 0.010 inches of mercury.

A1.2.2. Sample SPECI Observation. The following is a sample SPECI observation from Scott AFB IL: KBLV SPECI 010812Z 24020G40KT 2 1/2SM +FC +TSRAGR SQ FEW030CB SCT040 BKN050 25/22 A2992 RMK TORNADO 5SW MOV NE FUNNEL CLOUD B02E09 3W MOV NE PK WND 24041/01 TWR VIS 1 1/2 FRQ LTGCCCACG TSB59 5S-3W MOV NE GR 1/2 PRESFR VIS SW 1 1/2 WR//;

This observation is a METAR SPECI from Scott AFB IL on the 1st of the month at 0812Z. Winds are from 240 degrees at 20 knots, gusting to 40 knots. Visibility is 2\_ statute miles. There is a tornado and severe thunderstorm with rain and large hail occurring with a squall. Sky condition is few clouds at 3000 feet with cloud type cumulonimbus, scattered clouds at 4000 feet, broken clouds at 5000 feet. Temperature is 25× Celsius and the dewpoint is 22× Celsius. The altimeter setting is 29.92 inches of mercury. The remarks section indicates there is a tornado 5 miles southwest of the station moving northeast.

Funnel cloud began 2 minutes after the hour and ended 9 minutes after the hour 3 miles west of the station moving northeast. Peak wind was from 240 degrees at 41 knots and occurred 1 minute after the hour. Tower visibility is 1\_ statute miles. There is frequent cloud-to-cloud, cloud-to-air, and cloud-to-ground lightning. A thunderstorm began 59 minutes after the previous hour and is 5 miles south through 3 miles west of the station moving northeast. Hail is 1/2" in diameter. Pressure is falling rapidly and visibility to the southwest is 1\_ miles. The runway is wet.

## A1.3. Sample Weather Watch, Warning and Advisories formats

A1.3.1. Sample Weather Watch Format.

WEATHER WATCH 07-02

VALID 23/2300Z (23/1800L) TO 24/0400Z (23/2300L)

CONDITIONS ARE FAVORABLE FOR THE FORMATION OF SEVERE THUNDERSTORMS IN THE MCCONNELL AFB AREA FOR THE INDICATED VALID TIME. A WARNING WILL BE ISSUED LATER IF REQUIRED.

Explanation. This weather watch is the second issued in the month of July and is valid 23 July at 2300Z (1800L) to 24 July at 0400Z (23/2300L). The weather watch is for severe thunderstorms at McConnell AFB.

A1.3.2. Sample Weather Warning format.

AREA WEATHER WARNING 07-02

VALID 23/2300Z (23/1800L) TO 24/1100Z (24/0600L)

THUNDERSTORMS WITH WINDS IN EXCESS OF 50 KNOTS AND HAIL LARGER THAN OR EQUAL TO 3/4" DIAMETER ARE EXPECTED AT MCCONNELL AFB FOR THE INDICATED VALID TIME. PEAK WIND WILL BE 60 KNOTS.

Explanation. This weather warning is the second issued in the month of July and is valid from the 23rd at 2300Z (1800L) to the 24th at 1100Z (0600L). The warning indicates that thunderstorms are expected within 5nm of McConnell AFB and will have winds of approximately 60 knots and hail with 3/4" diameter or larger.

A1.3.3. Sample Weather Advisory format.

ADVISORY 06-40

VALID 08/1900Z (08/1400L) TO 08/2300Z (08/1800L)

WINDS IN EXCESS OF 35 KNOTS ARE EXPECTED AT MCCONNELL AFB FOR THE INDICATED VALID TIME. PEAK WIND WILL BE 38 KNOTS.

Explanation. This advisory is the 40th issued for the month of June and is valid from the 8th at 1900Z (1400L) to the 8th at 2300Z (1800L). The advisory is for winds of approximately 38 knots within 5NM of McConnell AFB.